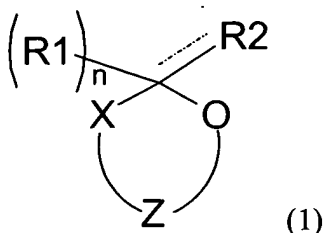


WHAT IS CLAIMED IS:

1. A method for treatment of at least one of hair, eyelashes, skin and nails, comprising applying to said hair, eyelashes, skin and/or nails a composition comprising, in a cosmetically acceptable medium, at least one cyclic carbonate capable of polymerizing under an external stimulus.
2. The method according to claim 1, wherein the external stimulus is chosen from radical polymerization initiators, anionic polymerization initiators, increased temperature, decreased temperature, and light.
3. The method according to claim 2, wherein the external stimulus is an anionic polymerization initiator.
4. The method according to claim 3, wherein the anionic polymerization initiator is water.
5. The method according to claim 1, wherein said method is a method of treatment for hair.
6. The method according to claim 5, wherein the treatment is chosen from at least one of hair styling, hair care, washing hair, coloring hair, making-up of hair, and shaping hair.
7. The method according to claim 5, wherein the method of treatment provides hair with at least one of body, volume, and fullness.
8. The method according to claim 5, wherein the method of treatment provides hair with improved resistance to shampooing.
9. The method according to claim 8, wherein the method of treatment provides hair with improved resistance to shampooing after the hair is colored.

10. The method according to claim 1, wherein the at least one cyclic carbonate is a compound of formula (1)



wherein:

- X is chosen from O and S;
- n is chosen from 0 and 1;
- R2 is chosen from O, S, OR3, and SR3;
- R1 and R3, which may be identical or different, are chosen from linear or branched C₁ to C₃₀ alkyl radicals, optionally substituted by at least one entity chosen from halogens and from amine, hydroxy, carboxy, C₁ to C₁₀ alkoxy, thiol, C₆ to C₂₀ aryl, and C₁ to C₈ alkoxy groups;
- R1 may form a heterocycle together with R2;
- Z is chosen from divalent linear or branched C₂ to C₃₀ alkylene radicals, optionally interrupted by at least one heteroatom, and optionally substituted by at least one radical chosen from hydroxys, C₆ to C₃₀ aryls, aminos, halogens, carboxys, C₁ to C₁₀ alkoxys, and thiols; and
- R2 optionally forms a heterocycle together with an atom of Z, the heterocycle being optionally substituted, and optionally comprising as least one heteroatom, wherein
- the compounds of formula (I) comprise less than four fused rings.

11. The method according to claim 10, wherein Z is chosen from divalent linear or branched C₆ to C₂₈ alkylene radicals.

12. The method according to claim 10, wherein the oxygen heterocycle comprising Z is a heterocycle comprising at least six members.

13. The method according to claim 10, wherein the compound of formula (1) is chosen from compounds which satisfy the criteria below and wherein R and R' are C₁ to C₄ alkyl radicals:

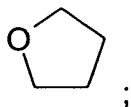
(i) X is O, n is 0, R₂ is S, and Z is CH₂-CH(R);

(ii) X is O, n is 0, R₂ is S, and Z is CH₂-CH(R)-CH₂;

(iii) X is S, n is 0, R₂ is S, and Z is CH₂-CH(R);

(iv) X is O, n is 1, Z is CH₂-CH₂, and

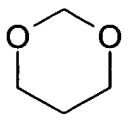
R₁ together with R₂ is



(v) X is O, n is 0, R₂ is O, and Z is chosen from CH₂-C(R)-CH₂ and CH₂-C(R')-CH₂;

(vi) X is O, n is 0, R₂ is O, and Z is CH₂-CH₂-CH₂-CH₂;

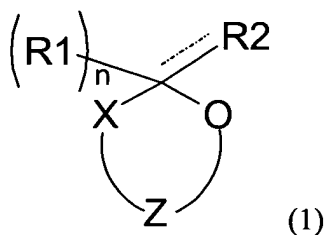
(vii) X is O, n is 1, Z is CH₂CH₂CH₂, and R₁ together with R₂ is



14. The method according to claim 1, wherein the composition further comprises at least one compound chosen from anionic fixative polymers, nonionic fixative polymers, amphoteric fixative polymers, conditioning agents, anionic direct dyes, quaternized cationic direct dyes, oxidation dyes, reducing agents, surfactants, and oxidizing agents.

15. A cosmetic composition comprising, in a cosmetically acceptable medium, (i) at least one compound chosen from anionic fixative polymers, nonionic fixative polymers, amphoteric fixative polymers, conditioning agents, anionic direct dyes, cationic quaternized direct dyes, oxidation dyes, reducing agents, surfactants, and oxidizing agents, combined with (ii) at least one cyclic carbonate capable of polymerizing under an external stimulus.

16. The composition according to claim 15, wherein the at least one cyclic carbonate is a compound of formula (1):



wherein:

- X is chosen from O and S;
- n is chosen from 0 and 1;
- R2 is chosen from O, S, OR3, and SR3;
- R1 and R3, which may be identical or different, are chosen from linear or branched C₁ to C₃₀ alkyl radicals, optionally substituted by at least one entity chosen from

halogens and from amine, hydroxy, carboxy, C₁ to C₁₀ alkoxy, thiol, C₆ to C₂₀ aryl, and C₁ to C₈ alkoxy groups;

- R1 may form a heterocycle together with R2;
- Z is chosen from divalent linear or branched C₂ to C₃₀ alkylene radicals, optionally interrupted by at least one heteroatom, and optionally substituted by at least one entity chosen from halogens and from hydroxy, C₆ to C₃₀ aryl, amino, carboxy, C₁ to C₁₀ alkoxy, and thiol groups; and
- R2 may form a heterocycle together with an atom of Z, the heterocycle being optionally substituted, and optionally comprising at least one heteroatom; wherein
- the compounds of formula (I) comprise less than four fused rings.

17. The composition according to claim 16, wherein Z is chosen from divalent linear or branched C₆ to C₂₈ alkylene radicals.

18. The composition according to claim 16, wherein the at least one cyclic carbonate compound of formula is present in the composition in an amount ranging from 0.001% to 50% by weight, relative to the total weight of the composition.

19. The composition according to claim 18, wherein the at least one cyclic carbonate compound of formula (1) is present in an amount ranging from 0.01% to 30% by weight, relative to the total weight of the composition.

20. The composition according to claim 19, wherein at least one cyclic carbonate compound of formula (1) is present in an amount ranging from 0.1% to 20% by weight, relative to the total weight of the composition.

21. The composition according to claim 15, wherein the at least one compound chosen from anionic fixative polymers, nonionic fixative polymers, amphoteric fixative

polymers, conditioning agents, anionic direct dyes, cationic direct dyes, oxidation dyes, reducing agents, surfactants, and oxidizing agents is present in the composition in an amount ranging from 0.001% to 50% by weight, relative to the total weight of the composition.

22. The composition according to claim 21, wherein the at least one compound is present in an amount ranging from 0.01% to 20% by weight, relative to the total weight of the composition.

23. The composition according to claim 22, wherein the at least one compound is present in an amount ranging from 0.1% to 10% by weight, relative to the total weight of the composition.

24. The composition according to claim 15, wherein the reducing agent is chosen from thioglycolic acid and its salts, thiolactic acid and its salts, cysteine, cysteamine, glycerol thioglycolate, sulfites, bisulfites, sulfinates, ascorbic acid, erythorbic acid, and glucose.

25. The composition according to claim 15, wherein the oxidizing agent is chosen from hydrogen peroxide, urea peroxide, alkali metal bromates, and persalts.

26. The composition according to claim 25, wherein said persalts are chosen from perborates, persulfates, and periodates.

27. The composition according to claim 15, wherein the surfactant is chosen from anionic surfactants, cationic surfactants, nonionic surfactants, and amphoteric surfactants.

28. The composition according to claim 15, wherein the oxidation dye is an oxidation base.

29. The composition according to claim 28, further comprising at least one coupler.

30. The composition according to claim 15, wherein the direct dye is chosen from azo dyes, quinone dyes, azine dyes, and triarylmethane dyes.

31. The composition according to claim 15, further comprising at least one additional component chosen from pH control agents, polymerization initiators, polymerization catalysts, solvents, antibacterial agents, pearling agents, propellant gases, particles, nanoparticles, and pigments.

32. The composition according to claim 31, wherein the polymerization initiator is a metal salt.

33. The composition according to claim 31, wherein the polymerization catalysts is an enzyme.

34. The composition according to claim 31, wherein the solvent is ethanol.